

U.S. Natural Gas Imports and Exports—1997

by Ann M. Ducca and Linda Cook

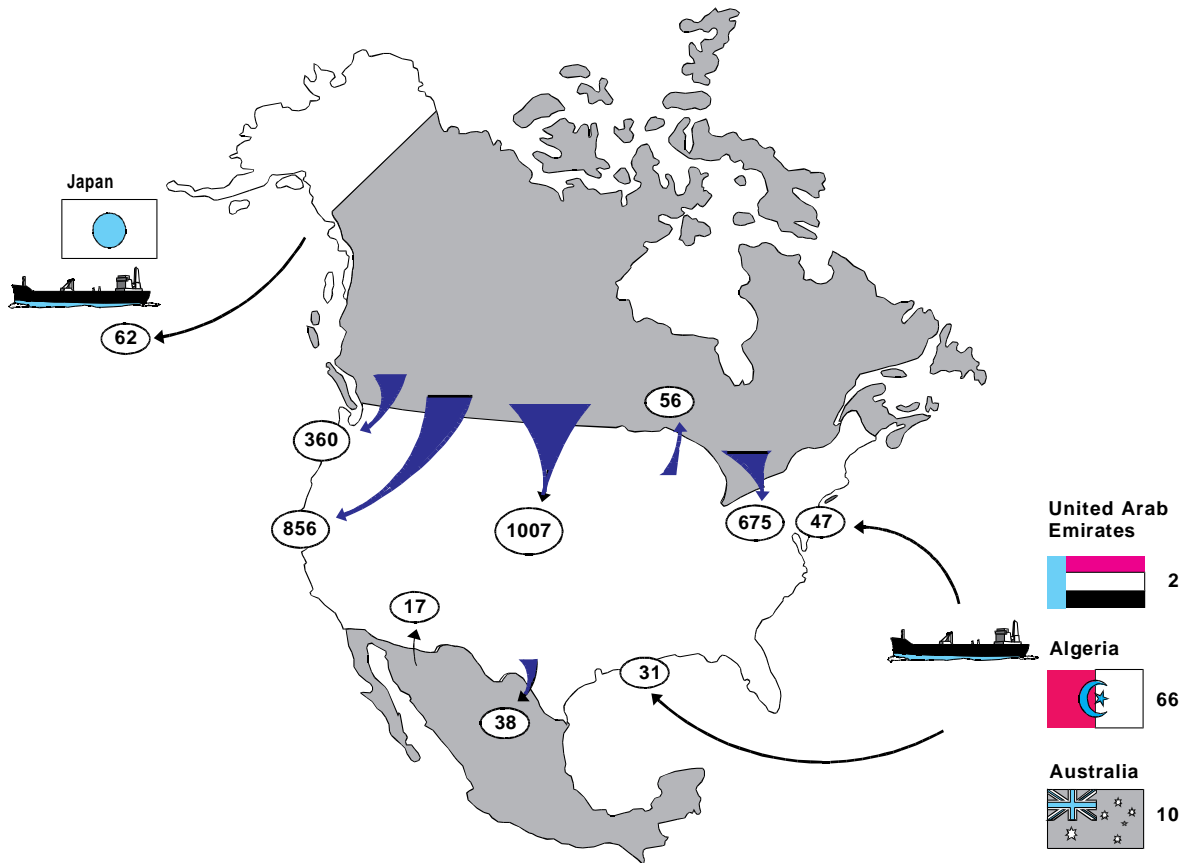
During 1997, Canada continued its role as the major supplier of natural gas imported into the United States (Table SR1). However, the growth rate of U.S. imports of Canadian gas was minimal because pipeline capacity utilization remained near its maximum level and capacity expanded very little during the year. Increases in pipeline capacity are under development or have been proposed for the next several years. Crossborder trade with Mexico also increased in 1997, and that nation holds substantial promise for expansion on both the supply and demand sides of the market (Tables SR2 and SR3). Spot purchases of liquefied natural gas

(LNG) rose as the United States responded to LNG availability in the world marketplace (Figure SR1).

Some of the highlights of 1997 for U.S. natural gas imports and exports are:

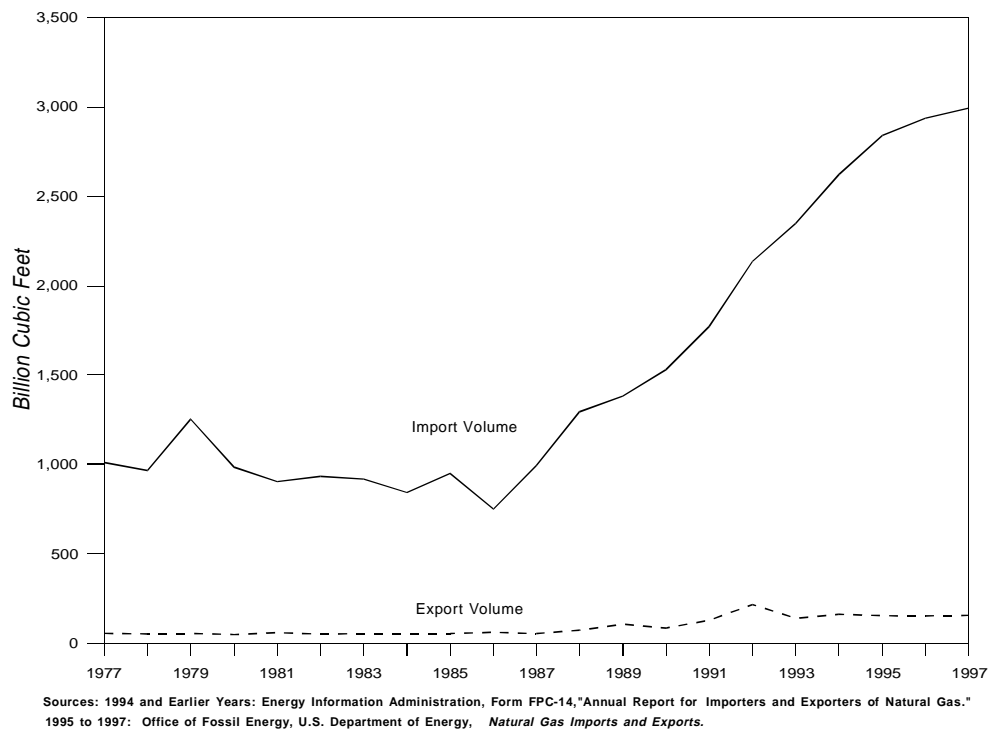
- Net imports rose for the 11th consecutive year, representing 13 percent of U.S. natural gas consumption.

Figure SR1. Flow of Natural Gas Imports and Exports, 1997
(Billion Cubic Feet)



Source: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

Figure SR2. Total Natural Gas Imports and Exports, 1977-1997



- Pipeline imports from Canada continued to climb to a new record level of 2,899 billion cubic feet, although the growth rate slowed considerably.
- The average price of natural gas imports from Canada was \$2.15 per thousand cubic feet. This is the highest average price since 1986.
- LNG imports totaled 77.8 billion cubic feet, almost double the 1996 level. This increase was primarily the result of the end of curtailments from Algeria which had been in effect since August 1994 because of a major renovation project on that nation's liquefaction plants.
- Spot market purchases of LNG totaled 12.1 billion cubic feet, 16 percent of total LNG imports. These shipments were received from the United Arab Emirates and, for the first time, from Australia.

Trade with Canada

For the 11th consecutive year, natural gas imports from Canada increased, reaching 2,899 billion cubic feet and accounting for 97 percent of total U.S. imports of natural gas (Figure SR2 and Table SR4). Net imports continued to represent a growing share of U.S. natural gas consumption—13 percent in 1997 (Figure SR5). The average price of natural gas imports from Canada was \$2.15 per thousand cubic feet, the highest average price since 1986 (Table SR7). It rose 10 percent from the 1996 price and 45 percent above 1995's 20-year record low of \$1.48 per thousand cubic feet. The increases in Canadian import prices follow the trend in the U.S. wellhead prices. The 1997 U.S. wellhead price was 3 percent more than the 1996 level and 44 percent above the 1995 price. (See Table 4 in the *Natural Gas Monthly* for wellhead prices.)

Despite the record import levels from Canada, the growth rate was minimal, less than 1 percent, in contrast to an average annual growth rate of 13 percent during the previous 10 years. The capacity of the pipelines that bring the gas across the border constrained the growth rate as current capacity is almost completely utilized and little capacity expansion occurred during 1997. More than 3 billion cubic feet per day of Canadian export capacity has been proposed over the next

Figure SR3. Average Price of U.S. Natural Gas Imports, 1980-1997

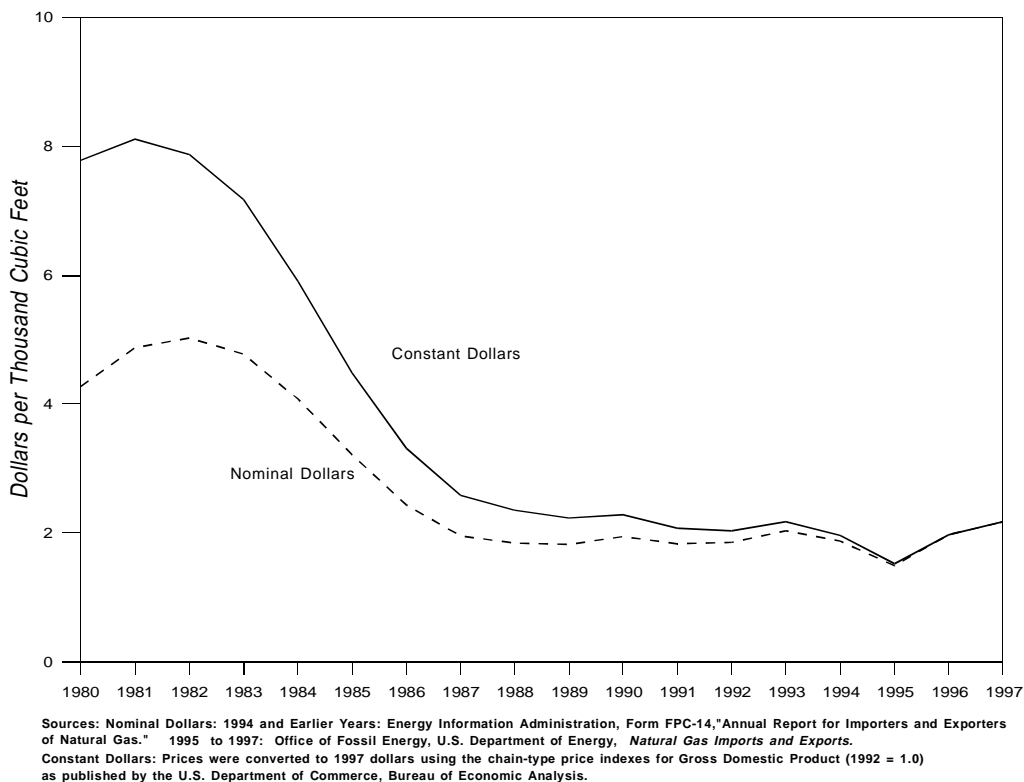


Figure SR4. Average Price of U.S. Natural Gas Exports, 1980-1997

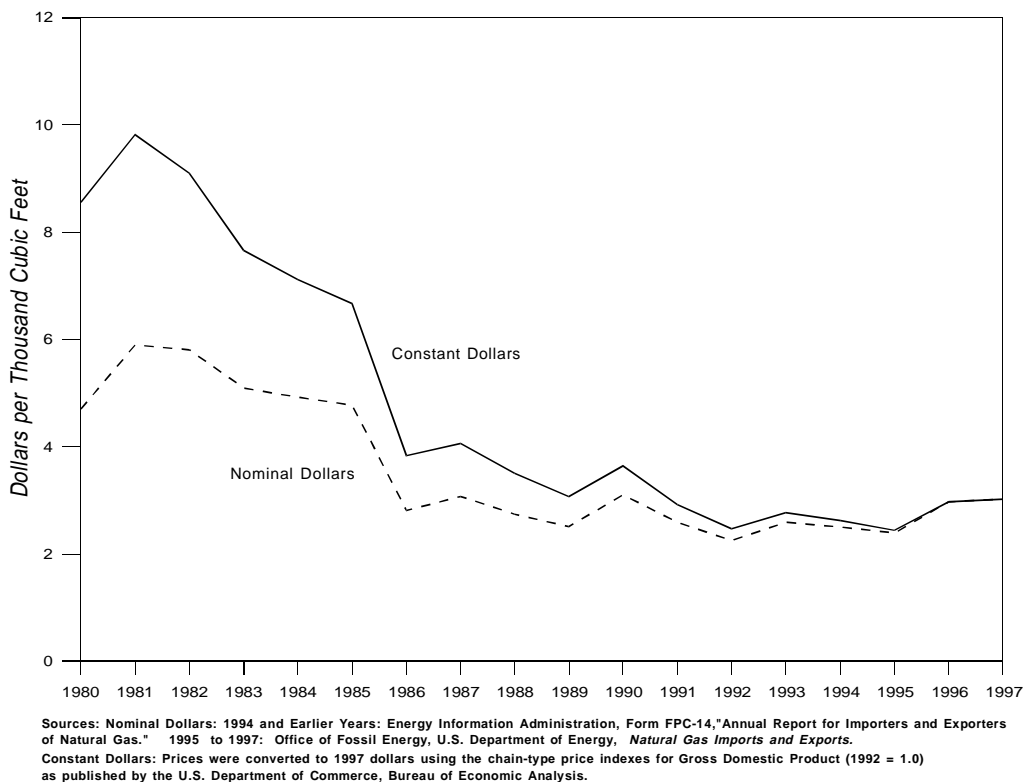
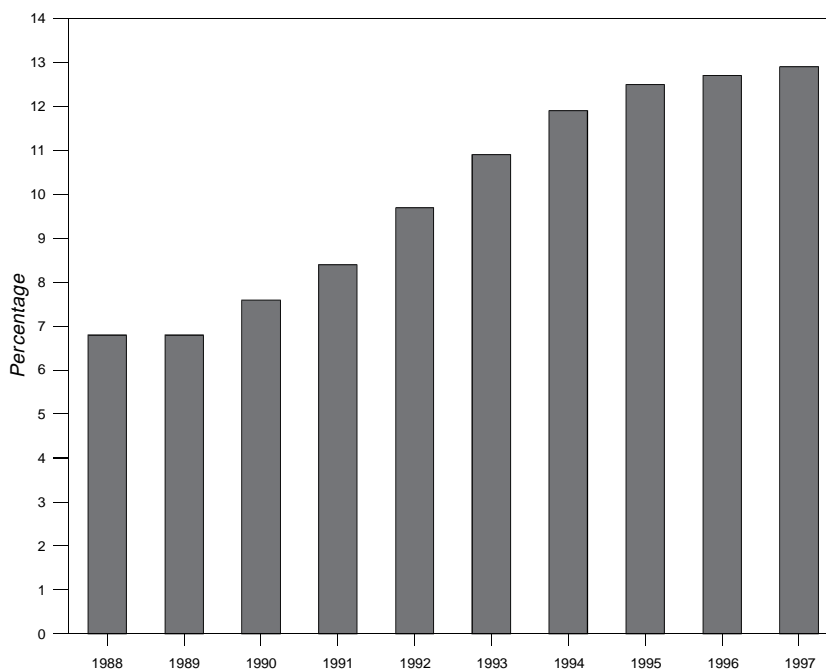


Figure SR5. Net Imports as a Percentage of Total Consumption, 1988-1997



Sources: 1994 and Earlier Years: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." 1995 to 1997: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

several years, principally into the U.S. Midwest and Northeast. For the most part, the proposals are driven by growing markets in the United States and by Canadian natural gas producers seeking market outlets for their expanding production capabilities. Capacity additions within the United States are also proposed for moving Canadian and domestic gas from the Midwest to the Northeast.

Two crossborder pipeline expansion projects, each with a projected in-service date of November 1998, will add large amounts of capacity. Northern Border's Chicago Project will increase capacity from the U.S. Canadian border at Port of Morgan, Montana into Iowa by 700 million cubic feet per day and extend the pipeline into Illinois just south of Chicago. The Portland Natural Gas Transmission System project will connect facilities at the border near East Hereford, Quebec and Pittsburg, New Hampshire with Westbrook, Maine. The Portland project will add 138 million cubic feet per day of capacity.

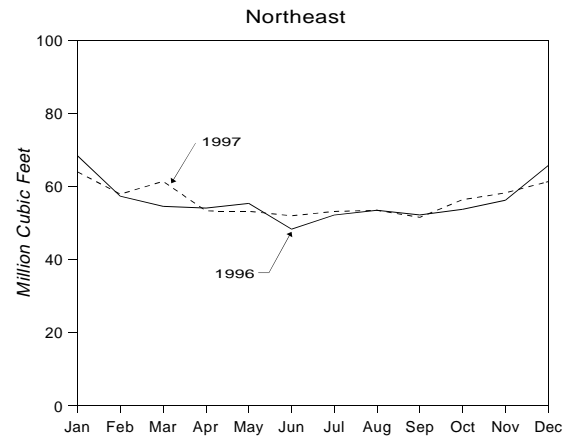
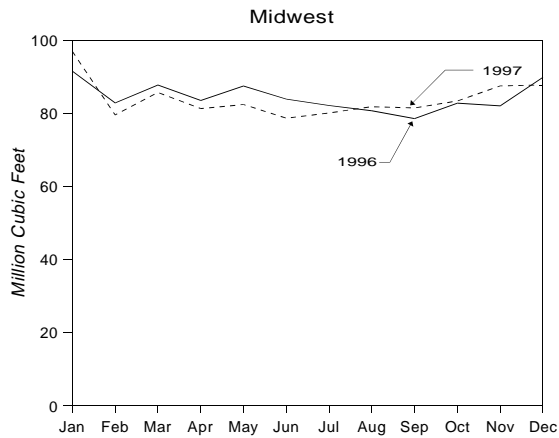
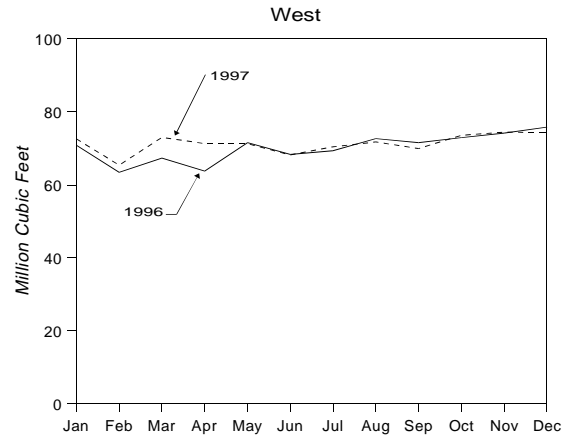
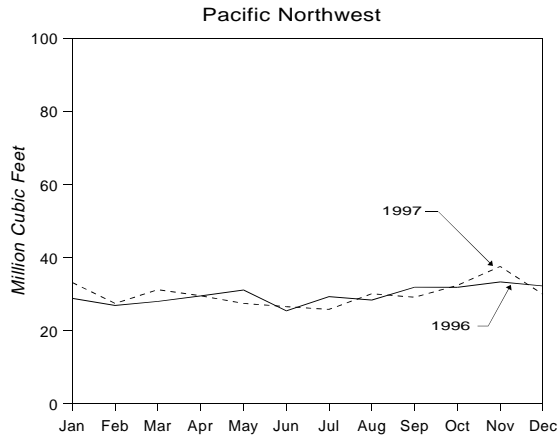
Import points of entry from Canada into the United States can be grouped into four regional areas: the Pacific Northwest, the West, the Midwest, and the Northeast. From 1996 to 1997, natural gas imports rose in all

regional areas except the Midwest. These increases were very moderate with the largest volumetric increase occurring in the West (14.4 billion cubic feet). The price of Canadian gas imports also rose in all regions but the Northeast (Table SR6 and Figures SR6 and SR7).

The Midwest region received the greatest volume of imports—1,007 billion cubic feet in 1997, despite a 1 percent decline from the 1996 level. The average price through the Midwest entry points located in Michigan, Minnesota, Montana, and North Dakota rose 9 percent, from \$2.10 to \$2.28 per thousand cubic feet. Northeast imports rose by 1 percent to 675.7 billion cubic feet. Imports enter the Northeast through New York and Vermont. The Northeast paid the highest regional price, \$2.90 per thousand cubic feet. This was 1 percent lower than the 1996 price in the region, but 81 percent more than the price paid in the West region.

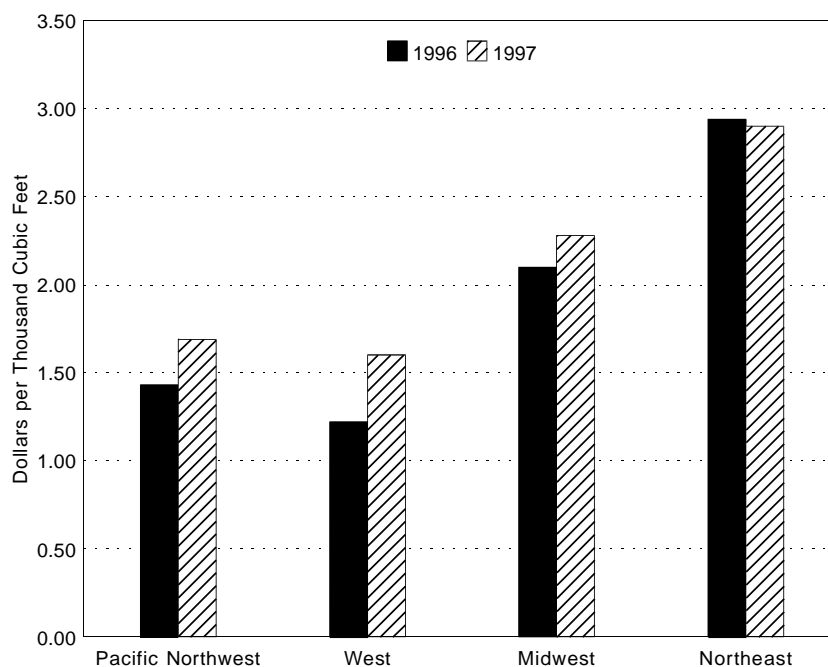
Canadian gas imports into the Pacific Northwest region reached 360 billion cubic feet in 1997, 1 percent above last year's level. There is a single entry point at Sumas, Washington. This region experienced a substantial rise in price, from \$1.43 per thousand cubic feet in 1996 to \$1.69 in 1997, an 18-percent increase. The West region

Figure SR6. U.S. Natural Gas Pipeline Imports from Canada by Regional Point of Entry, 1996-1997



Source: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

Figure SR7. Average Price of U.S. Natural Gas Pipeline Imports from Canada by Regional Point of Entry, 1996-1997



Source: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

also has only one entry point, located at Eastport, Idaho, and had the second-highest regional import volume in 1997 at 857 billion cubic feet, a 2 percent increase over the 1996 level. Most of the West imports are marketed in California. The West had the sharpest price increase above the 1996 price, 31 percent, but at \$1.60 per thousand cubic feet remained the lowest regional price in 1997, only 5 percent less than the Pacific Northwest regional price.

Natural gas exports to Canada rose to 56 billion cubic feet, a 9-percent increase over 1996 levels. The average price of these exports was \$2.52 per thousand cubic feet, 6 percent less than the 1996 price (Table SR3). Exports to Canada represented 36 percent of total U.S. natural gas exports during 1997.

Trade With Mexico

Exports of natural gas to Mexico rose in 1997 to 38.4 billion cubic feet, 13 percent above the 1996 level, but still well below the peak of 96.0 billion cubic feet in 1992. The price of exports to Mexico also climbed to \$2.46 per thousand cubic feet, up 17 percent from 1996 and the highest price since 1988 (Table SR9). The

United States imported 17.2 billion cubic feet of natural gas from Mexico in 1997, 24 percent more than during 1996. The United States did not import gas from Mexico from 1985 through November 1993. Since trade resumed in December 1993, imports from Mexico have represented less than 1 percent of total annual U.S. natural gas imports (Table SR4).

The fact that gas exports to Mexico are still less than in 1992 may reflect the increased availability of gas in Mexico because of increases in production by Petroleos Mexicanos (Pemex) during 1997. This additional production may have displaced some U.S. supplies. However, Mexico still holds substantial promise for expansion on both the supply and demand sides of the market. Extensive infrastructure development is underway that will increase crossborder flows of gas in both directions. This development includes construction in Mexico of gas-fired electric utilities as well as natural gas distribution infrastructure, which will promote expanded gas consumption. Mexican sources predict that U.S. imports from Mexico will continue to grow but that Mexico is expected to be a net importer of natural gas during the foreseeable future.

Liquefied Natural Gas

During 1997, the United States imported liquefied natural gas (LNG) from Algeria, the United Arab Emirates (Abu Dhabi), and, for the first time, from Australia. The shipments from the United Arab Emirates and Australia were spot purchases. LNG shipments totaled 77.8 billion cubic feet, almost double the 1996 level. They were received in Massachusetts and Louisiana and represented 3 percent of total natural gas imports. LNG was exported from Alaska to Japan. These exports accounted for 40 percent of total gas exports.

LNG imports from Algeria rose to 65.7 billion cubic feet in 1997, the highest level since 1993. This increase was primarily the result of the end of curtailments, which began in August 1994. Sonatrach, the state-owned oil and gas company in Algeria, curtailed exports because of a major renovation project on that nation's liquefaction plants. Those renovations have progressed so that the original capacities of its liquefaction plants have been restored. By late 1996, Algerian shipments into the United States returned to near pre-curtailment levels, measured as the average of Algerian imports during 1990 through 1993. During 1997, Algerian imports represented 84 percent of LNG imports, but only 2 percent of the total amount of natural gas imported into the United States. The price of Algerian imports was \$2.67 per thousand cubic feet, 1 percent less than the 1996 price.

An LNG shipment of 2.4 billion cubic feet was imported from the United Arab Emirates in January. Shipments from Australia were received in May, September, and November, totaling 9.7 billion cubic feet. The price for the shipments from the United Arab Emirates averaged \$3.74 per thousand cubic feet, and from Australia, \$2.92 per thousand cubic feet (Table SR2). Purchasing of LNG on the spot market is likely to continue in the foreseeable future because of a world-wide surplus of LNG production capacity, reduced demand caused by economic problems in the Far East, and reduced costs caused by new technological developments in the liquefaction process. Spot sales into the United States will continue if the market price of gas is high enough to justify long distance sales.¹

LNG exports from Alaska to Japan fell by 8 percent from 1996 to 1997 to 62.2 billion cubic feet (Tables SR5 and SR8). This decline may reflect the economic difficulties in the Far East that have resulted in reduced

demand for energy in general and LNG in particular. The price for these exports increased by 5 percent between 1996 and 1997 to \$3.83 per thousand cubic feet.

At present, there are two LNG import facilities in the United States that are not receiving LNG shipments. The Cove Point LNG facility in southern Maryland continues to be used to liquefy and store gas for later regasification during peak demand periods. Currently the facility uses domestic gas, but in the long term it expects to be a receiving terminal for LNG tankers. The Elba Island LNG facility in Georgia is not scheduled for operation through 2000.

Two LNG projects are nearing completion that may have an impact on U.S. LNG trade:

- **The Trinidad and Tobago Export Facility.** This project would develop the natural gas resources off the east coast of Trinidad. It has one of the largest project-funding agreements ever to be completed in the Caribbean/Latin American region. Construction of an LNG facility on Trinidad began in 1996 with an anticipated completion date of mid-1999. This facility will target markets in the Northeastern United States, Spain, and Puerto Rico.
- **The EcoElectrica Power Plant in Puerto Rico.** EcoElectrica began construction of a powerplant in January 1998 to be fueled by LNG supplied from Trinidad and other possible sources. EcoElectrica estimates that the facility will be completed and begin operations in 2000.

Summary

Despite record import levels from Canada during 1997, the growth rate slowed considerably as pipeline capacity utilization remained near its maximum level and new capacity additions were limited. A number of pipeline projects are underway that would add substantial export capacity from Canada into the U.S. Midwest and Northeast. Trade between the United States and Mexico continued to evolve, and Mexico holds substantial promise for expansion on both the supply and demand sides of natural gas markets. Spot market purchases of LNG totaled 12.1 billion cubic feet, 16 percent of total LNG imports. These shipments were received from the United Arab Emirates and, for the first time, from Australia.

¹ U.S. Department of Energy, Office of Fossil Energy, *Natural Gas Imports and Exports, Fourth Quarter Report 1997*, DOE/FE-0360-4 (March 1998).

Data Sources

Data for 1995, 1996, and 1997 are based on company filings made with the U.S. Department of Energy, Office of Fossil Energy. These filings report data on a monthly level and are received quarterly. The Office of Fossil Energy collects these data as part of its regulatory oversight responsibilities. These data are published by the Office of Fossil Energy in the quarterly report, *Natural Gas Imports and Exports* (DOE/FE-0360).

The data for 1994 and earlier years are taken from Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." The Form FPC-14 was discontinued in 1995. The data reported on Form FPC-14 represented physical movements of natural gas. The data collected by the Office of Fossil Energy are reported on an equity (sales) basis. For 1994 and earlier years, comparisons of the information in this article (physical movements) with the information reported by the Office of Fossil Energy (sales) may show differences because reporting requirements were different. Efforts were made to resolve these differences. Further information about how import and export data are collected is provided in the *Natural Gas Monthly*, Appendix B, "Data Sources."

Table SR1. Historical Summary of U.S. Natural Gas Net Imports, 1955-1997
(Million Cubic Feet)

Year	Total Imports	Total Exports	Net Imports	Total Consumption	Net Imports as Percentage of Total Consumption
1955	10,888	31,029	-	8,693,657	-
1956	10,380	35,963	-	9,288,865	-
1957	37,941	41,655	-	9,846,139	-
1958	135,797	38,719	97,078	10,302,608	0.9
1959	133,990	18,413	115,577	11,321,181	1.0
1960	155,646	11,332	144,314	11,966,537	1.2
1961	218,860	10,747	208,113	12,489,268	1.7
1962	401,534	15,814	385,720	13,266,513	2.9
1963	406,204	16,957	389,247	13,970,229	2.8
1964	443,326	19,603	423,723	14,813,808	2.9
1965	456,394	26,132	430,262	15,279,716	2.8
1966	479,780	24,639	455,141	16,452,403	2.8
1967	564,226	81,614	482,612	17,388,360	2.8
1968	651,885	93,745	558,140	18,632,062	3.0
1969	726,951	51,304	675,647	20,056,240	3.4
1970	820,780	69,813	750,967	21,139,386	3.6
1971	934,548	80,212	854,336	21,793,454	3.9
1972	1,019,496	78,013	941,483	22,101,452	4.3
1973	1,032,901	77,169	955,732	22,049,363	4.3
1974	959,284	76,789	882,495	21,223,133	4.2
1975	953,008	72,675	880,333	19,537,593	4.5
1976	963,768	64,711	899,057	19,946,496	4.5
1977	1,011,002	55,626	955,376	19,520,581	4.9
1978	965,545	52,532	913,013	19,627,478	4.7
1979	1,253,383	55,673	1,197,710	20,240,761	5.9
1980	984,767	48,731	936,036	19,877,293	4.7
1981	903,949	59,372	844,577	19,403,858	4.4
1982	933,336	51,728	881,608	18,001,055	4.9
1983	918,407	54,639	863,768	16,834,914	5.1
1984	843,060	54,753	788,307	17,950,524	4.4
1985	949,715	55,268	894,447	17,280,943	5.2
1986	750,449	61,271	689,178	16,221,296	4.2
1987	992,532	54,020	938,512	17,210,809	5.5
1988	1,293,812	73,638	1,220,174	18,029,588	6.8
1989	1,381,520	106,871	1,274,648	18,800,830	6.8
1990	1,532,259	85,565	1,446,694	18,716,269	7.6
1991	1,773,313	129,244	1,644,068	19,035,156	8.4
1992	2,137,504	216,282	1,921,222	19,544,364	9.7
1993	2,350,115	140,183	2,209,931	20,279,095	10.9
1994	2,623,839	161,738	2,462,101	20,707,717	11.9
1995	2,841,048	154,119	2,686,929	21,580,665	12.5
1996	2,937,413	153,393	2,784,020	21,966,991	12.7
1997	2,994,173	157,006	2,837,167	^a 21,979,661	12.9

^a Preliminary data.

- = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. Geographic coverage is the continental United States including Alaska.

Source: **Total Consumption:** *Natural Gas Annual 1990 Volume 2* for 1955 through 1988; *Natural Gas Monthly* July 1995 for 1989 and 1990, August 1998 for 1991 through 1997. **All Other Data:** 1955-1971: Federal Power Commission, informally collected by letter. 1972-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." 1995 to 1997: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

Table SR2. Summary of U.S. Natural Gas Imports, 1996-1997

Source	Volume		Average Btu/ Cubic Foot	Revenue (thousand dollars)		Average Price		Average Price					
	(million cubic feet)			Percent Change	1996	1997	1996	1997	(dollars/ thousand cubic feet)		Percent Change	(dollars/ million Btu)	
	1996	1997	1996						1997	1996		1997	1996
Pipeline													
Canada	2,883,277	2,899,152	0.6	1,021	1,021	5,645,578	6,243,101	1.96	2.15	9.7	1.92	2.11	9.9
Mexico	13,862	17,243	24.4	1,013	1,013	31,236	39,893	2.25	2.31	2.7	2.22	2.28	2.7
Total	2,897,138	2,916,394	0.7	1,021	1,021	5,676,814	6,282,994	1.96	2.15	9.7	1.92	2.11	9.9
LNG													
Algeria	35,325	65,675	85.9	1,100	1,100	95,522	175,618	2.70	2.67	-1.1	2.46	2.43	-1.2
Australia		9,686	-	0	1,141	0	28,315	0.00	2.92	-	0.00	2.56	-
Un. Arab Emirates	4,949	2,417	-51.2	1,115	1,115	17,102	9,028	3.46	3.74	8.1	3.10	3.35	8.1
Total	40,274	77,778	120.2	1,100	1,106	95,522	212,961	2.70	2.74	1.5	2.46	2.48	0.8
Grand Total	2,937,412	2,994,173	2.1	1,022	1,023	5,772,336	6,495,955	1.97	2.17	10.2	1.93	2.12	9.8

Notes: Totals may not equal sum of components due to independent rounding. Geographic coverage is the continental United States including Alaska.

Source: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

Table SR3. Summary of U.S. Natural Gas Exports, 1996-1997

Source	Volume		Average Btu/ Cubic Foot	Cost (thousand dollars)		Average Price		Average Price					
	(million cubic feet)			Percent Change	1996	1997	1996	1997	(dollars/ thousand cubic feet)		Percent Change	(dollars/ million Btu)	
	1996	1997	1996						1997	1996		1997	1996
Pipeline													
Canada	51,905	56,447	8.8	1,013	1,013	138,345	142,153	2.67	2.52	-5.6	2.63	2.49	-5.3
Mexico	33,840	38,372	13.4	1,011	1,011	71,369	94,287	2.11	2.46	16.6	2.09	2.43	16.3
Total	85,745	94,818	10.6	1,012	1,012	209,714	236,440	2.45	2.49	1.6	2.42	2.46	1.7
LNG													
Japan	67,648	62,187	-8.1	1,010	1,010	246,589	238,404	3.65	3.83	4.9	3.61	3.80	5.3
Grand Total	153,393	157,006	2.4	1,011	1,011	456,303	474,844	2.97	3.02	1.7	2.94	2.99	1.7

Notes: Totals may not equal sum of components due to independent rounding. Geographic coverage is the continental United States including Alaska.

Source: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

Table SR4. Historical Summary of U.S. Natural Gas Imports, 1955-1997
(Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year	Imports from Canada		Imports from Mexico Pipeline	Imports from Algeria LNG	Imports from Others LNG	Total Imports ^a	Average Price
	Pipeline	LNG					
1955	10,881	0	7	0	0	10,888	NA
1956	10,374	0	6	0	0	10,380	NA
1957	20,971	0	16,970	0	0	37,941	NA
1958	89,586	0	46,211	0	0	135,797	NA
1959	83,061	0	50,929	0	0	133,990	NA
1960	108,657	0	46,989	0	0	155,646	NA
1961	167,104	0	51,756	0	0	218,860	NA
1962	350,438	0	51,096	0	0	401,534	NA
1963	356,455	0	49,749	0	0	406,204	NA
1964	390,721	0	52,605	0	0	443,326	NA
1965	404,686	0	51,708	0	0	456,394	NA
1966	430,189	0	49,591	0	0	479,780	NA
1967	513,255	0	50,971	0	0	564,226	NA
1968	604,462	0	47,423	NA	0	651,885	NA
1969	680,106	0	46,845	NA	0	726,951	NA
1970	778,687	NA	41,336	757	0	820,780	NA
1971	910,926	1,500	20,689	1,433	0	934,548	NA
1972	1,009,093	230	8,140	2,032	0	1,019,496	0.31
1973	1,027,216	667	1,632	3,388	0	1,032,901	0.35
1974	959,063	0	222	0	0	959,284	0.55
1975	948,115	0	0	4,893	0	953,008	1.21
1976	953,613	0	0	10,155	0	963,768	1.72
1977	996,723	572	2,384	11,324	0	1,011,002	1.98
1978	881,123	0	0	84,422	0	965,545	2.13
1979	1,000,775	0	0	252,608	0	1,253,383	2.49
1980	796,507	0	102,410	85,850	0	984,767	4.28
1981	762,107	6	105,013	36,824	0	903,949	4.88
1982	783,407	0	94,794	55,136	0	933,336	5.03
1983	711,923	0	75,361	131,124	0	918,407	4.78
1984	755,368	0	51,502	36,191	0	843,060	4.08
1985	926,056	0	0	23,659	0	949,715	3.21
1986	748,780	0	0	0	^b 1,669	750,449	2.43
1987	992,532	0	0	0	0	992,532	1.95
1988	1,276,322	0	0	17,490	0	1,293,812	1.84
1989	1,339,357	0	0	42,163	0	1,381,520	1.82
1990	1,448,065	0	0	84,193	0	1,532,259	1.94
1991	1,709,716	0	0	63,596	0	1,773,313	1.83
1992	2,094,387	0	0	43,116	0	2,137,504	1.85
1993	2,266,751	0	1,678	81,685	0	2,350,115	2.03
1994	2,566,049	0	7,013	50,778	0	2,623,839	1.87
1995	2,816,408	0	6,722	17,918	0	2,841,048	1.49
1996	2,883,277	0	13,862	35,325	^c 4,949	2,937,413	1.97
1997	2,899,152	0	17,243	65,675	^d 12,103	2,994,173	2.17

^a Volumes reported for 1966 through 1997 are on a pressure base of 14.73 pounds per square inch absolute and 60 degrees Fahrenheit. Volumes for 1955 through 1965 are as reported.

^b Received from Indonesia.

^c Received from United Arab Emirates.

^d 9,685 received from Australia and 2,417 received from United Arab Emirates.

NA = Not available.

Notes: Totals may not equal sum of components due to independent rounding. Geographic coverage is the continental United States including Alaska.

Source: 1955-1971: Federal Power Commission, informally collected by letter. 1972-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." 1995 to 1997: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

Table SR5. Historical Summary of U.S. Natural Gas Exports, 1955-1997
(Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year	Exports to Canada Pipeline	Exports to Mexico Pipeline	Exports to Japan LNG	Total Exports ^a	Average Price
1955	11,467	19,562	0	31,029	NA
1956	16,819	19,144	0	35,963	NA
1957	30,867	10,788	0	41,655	NA
1958	32,129	6,590	0	38,719	NA
1959	11,739	6,674	0	18,413	NA
1960	5,759	5,573	0	11,332	NA
1961	5,577	5,170	0	10,747	NA
1962	5,574	10,240	0	15,814	NA
1963	6,879	10,078	0	16,957	NA
1964	9,763	9,840	0	19,603	NA
1965	17,979	8,153	0	26,132	NA
1966	20,281	4,358	0	24,639	NA
1967	70,456	11,158	0	81,614	NA
1968	81,647	12,098	0	93,745	NA
1969	34,931	13,391	2,982	51,304	NA
1970	10,878	14,678	44,257	69,813	NA
1971	14,349	15,632	50,231	80,212	NA
1972	15,553	14,579	47,882	78,013	0.51
1973	14,824	13,999	48,346	77,169	0.54
1974	13,263	13,268	50,258	76,789	0.72
1975	10,219	9,454	53,002	72,675	1.25
1976	7,506	7,425	49,779	64,711	1.55
1977	31	3,940	51,655	55,626	1.92
1978	66	4,033	48,434	52,532	2.13
1979	76	4,308	51,289	55,673	2.29
1980	113	3,886	44,732	48,731	4.70
1981	106	3,337	55,929	59,372	5.90
1982	162	1,705	49,861	51,728	5.81
1983	136	1,646	52,857	54,639	5.10
1984	127	1,786	52,840	54,753	4.92
1985	178	2,207	52,883	55,268	4.77
1986	9,203	1,896	50,172	61,271	2.81
1987	3,297	2,125	48,599	54,020	3.07
1988	19,738	2,327	51,573	73,638	2.74
1989	38,443	17,004	51,424	106,871	2.51
1990	17,359	15,659	52,546	85,565	3.10
1991	14,791	60,448	54,005	129,244	2.59
1992	67,777	95,973	52,532	216,282	2.25
1993	44,518	39,676	55,989	140,183	2.59
1994	52,556	46,500	62,682	161,738	2.50
1995	27,554	61,283	65,283	154,119	2.39
1996	51,905	33,840	67,648	153,393	2.97
1997	56,447	38,372	62,187	157,006	3.02

^a Volumes reported for 1966 through 1997 are on a pressure base of 14.73 pounds per square inch absolute and 60 degrees Fahrenheit. Volumes for 1955 through 1965 are as reported.

NA = Not available.

Notes: Totals may not equal sum of components due to independent rounding. Geographic coverage is the continental United States including Alaska.

Source: 1955-1971: Federal Power Commission, informally collected by letter. 1972-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." 1995 to 1997: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

Table SR6. U.S. Natural Gas Imports by Point of Entry, 1996-1997
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Canada (Pipeline)							
	Pacific Northwest		West		Midwest			
	Sumas, WA		Eastport, ID		Babb, MT		Detroit, MI	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1996								
January	28,846	1.32	70,890	1.14	1,717	1.13	1,094	2.99
February	26,907	1.30	63,462	1.13	1,787	1.15	1,017	2.69
March	27,998	1.20	67,378	1.07	1,515	1.13	822	2.65
April	29,522	1.02	63,802	0.97	862	1.16	1,170	2.78
May	31,119	1.02	71,599	0.96	1,149	1.14	1,374	2.54
June	25,397	1.03	68,369	0.96	2,301	1.00	1,254	2.65
July	29,278	1.14	69,350	1.06	594	1.09	1,448	2.92
August	28,358	1.19	72,691	1.17	485	1.13	1,218	2.91
September	31,892	1.12	71,589	1.09	777	1.11	1,349	2.38
October	31,846	1.24	72,952	1.15	1,055	1.08	1,010	2.53
November	33,330	2.14	74,184	1.60	1,847	1.22	1,779	2.86
December	32,217	3.16	75,849	2.20	2,458	1.40	1,366	3.05
Total	356,711	1.43	842,114	1.22	16,545	1.16	14,901	2.75
1997								
January	33,173	3.18	72,616	2.46	1,895	1.61	1,390	3.70
February	27,443	2.06	65,440	1.93	1,721	1.26	1,174	3.04
March	31,209	1.14	73,033	1.31	2,018	1.22	921	2.41
April	29,521	1.18	71,320	1.28	973	1.29	1,195	2.04
May	27,455	1.41	71,307	1.40	1,038	1.40	883	2.10
June	26,557	1.38	68,206	1.37	2,009	1.35	712	2.19
July	25,801	1.29	70,432	1.35	1,743	1.35	920	2.09
August	30,095	1.22	71,778	1.33	1,507	1.29	824	2.16
September	29,120	1.33	69,963	1.43	1,901	1.29	657	2.36
October	32,391	1.59	73,598	1.69	844	1.41	1,086	2.26
November	37,581	2.39	74,465	2.08	1,322	1.78	829	2.54
December	29,916	1.73	74,344	1.61	1,506	1.70	909	2.52
Total	360,261	1.69	856,503	1.60	18,477	1.40	11,501	2.51

See footnotes at the end of table.

Table SR6. U.S. Natural Gas Imports by Point of Entry, 1996-1997 (Continued)
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Canada (Pipeline)							
	Midwest							
	International Falls, MN		Marysville, MI		Noyes, MN		Port of Del Bonita, MT	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1996								
January	545	1.83	0	-	35,962	2.64	7	1.05
February	495	1.83	10	3.48	32,842	2.29	5	1.05
March	559	1.78	0	-	34,892	2.48	7	1.06
April	521	1.69	0	-	31,383	2.44	7	1.04
May	514	1.51	0	-	34,559	2.16	7	1.04
June	478	1.44	0	-	32,217	2.23	3	1.04
July	494	1.46	0	-	32,636	2.38	7	1.02
August	496	1.50	0	-	30,988	2.23	6	1.02
September	479	1.48	0	-	30,558	1.93	6	1.02
October	479	1.55	0	-	31,733	1.95	6	1.05
November	647	1.79	0	-	31,863	2.56	6	1.05
December	666	2.37	0	-	34,782	3.33	5	1.05
Total	6,373	1.71	10	3.48	394,415	2.40	72	1.04
1997								
January	681	2.56	0	-	41,437	3.69	5	1.05
February	594	2.75	0	-	31,710	2.82	5	1.05
March	658	1.81	0	-	33,867	1.93	5	1.05
April	520	1.67	0	-	32,291	1.91	5	1.05
May	510	1.92	0	-	32,819	2.08	5	1.05
June	478	1.85	0	-	30,238	2.22	3	1.05
July	496	1.76	0	-	30,630	2.13	5	1.05
August	420	1.65	0	-	31,340	2.09	5	1.05
September	408	1.72	0	-	32,005	2.25	5	1.05
October	512	2.02	0	-	31,377	2.71	5	1.02
November	616	2.27	0	-	34,838	2.90	5	1.01
December	652	1.99	0	-	33,099	2.43	5	1.00
Total	6,544	2.03	0	-	395,650	2.46	58	1.04

See footnotes at the end of table.

Table SR6. U.S. Natural Gas Imports by Point of Entry, 1996-1997 (Continued)
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Canada (Pipeline)							
	Midwest							
	Port of Morgan, MT		Portal, ND		St. Clair, MI		Warroad, MN	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1996								
January	49,129	1.83	313	1.18	2,015	3.66	147	2.51
February	45,015	1.72	292	1.07	660	4.22	142	2.03
March	48,752	1.79	312	1.07	191	5.05	76	1.98
April	46,255	1.97	521	1.02	2,204	2.93	50	2.15
May	47,947	1.75	535	1.00	793	2.34	32	1.63
June	45,901	1.75	606	1.00	583	2.59	5	1.67
July	45,262	1.85	657	1.11	475	2.60	14	1.99
August	44,888	1.82	630	1.13	1,471	2.43	14	1.72
September	42,447	1.44	609	1.12	1,795	2.11	17	1.21
October	45,761	1.60	630	1.16	1,504	2.54	32	1.21
November	44,399	2.25	494	1.77	378	3.35	73	1.87
December	47,318	3.10	512	2.60	2,064	4.04	83	2.96
Total	553,073	1.91	6,110	1.27	14,132	3.04	685	2.14
1997								
January	47,779	3.53	358	3.75	2,717	3.98	86	3.61
February	42,209	2.39	282	2.41	1,274	3.30	77	2.15
March	46,923	1.34	625	1.31	14	2.20	62	1.20
April	44,456	1.51	633	1.22	679	2.18	48	1.18
May	45,438	1.63	652	1.30	519	2.47	29	1.45
June	43,413	1.79	510	1.25	799	2.52	15	1.67
July	44,688	1.80	645	1.21	466	2.36	13	1.57
August	45,576	1.88	926	1.23	715	2.42	5	1.52
September	44,943	2.27	317	1.12	748	2.84	16	1.86
October	46,366	2.70	1,005	1.69	1,635	3.20	35	2.60
November	47,091	3.02	854	2.58	1,351	3.58	62	2.06
December	49,141	2.20	866	1.75	939	2.84	63	2.88
Total	548,022	2.18	7,672	1.67	11,855	3.16	512	2.22

See footnotes at the end of table.

Table SR6. U.S. Natural Gas Imports by Point of Entry, 1996-1997 (Continued)
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Canada (Pipeline)							
	Midwest				Northeast			
	Whitlash, MT		Total		Champlain, NY		Grand Island, NY	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1996								
January	616	1.14	91,544	2.18	1,454	3.26	6,875	3.59
February	569	1.25	82,835	1.96	1,377	3.27	6,347	3.50
March	625	1.21	87,753	2.06	1,459	3.26	3,134	3.29
April	578	1.11	83,550	2.16	1,337	3.26	2,988	3.13
May	556	1.01	87,465	1.91	1,372	3.27	3,180	2.82
June	542	0.93	83,889	1.92	1,317	3.27	2,092	2.96
July	557	0.93	82,143	2.07	1,378	3.27	2,317	3.08
August	504	0.99	80,700	1.99	1,387	3.28	2,236	2.94
September	520	0.98	78,557	1.65	1,330	3.27	2,097	2.82
October	553	1.02	82,761	1.75	1,305	3.25	2,122	2.74
November	565	1.21	82,050	2.35	953	3.39	3,385	3.32
December	636	1.71	89,889	3.15	1,435	3.40	6,058	4.11
Total	6,820	1.14	1,013,137	2.10	16,104	3.29	42,832	3.35
1997								
January	638	1.83	96,986	3.56	1,541	3.41	5,635	4.65
February	544	2.24	79,590	2.56	1,433	3.37	5,177	3.66
March	603	1.42	85,696	1.59	1,527	3.34	6,577	2.81
April	510	1.21	81,309	1.68	1,343	3.35	2,039	2.92
May	518	1.46	82,412	1.82	1,408	3.38	2,274	3.00
June	482	1.39	78,657	1.95	1,334	3.39	2,162	3.10
July	501	1.34	80,107	1.92	1,329	3.39	2,185	3.02
August	496	1.26	81,813	1.95	1,259	3.39	2,105	3.04
September	477	2.04	81,476	2.24	1,330	3.39	1,981	3.22
October	523	1.44	83,389	2.67	1,466	3.40	2,272	3.56
November	543	1.79	87,512	2.94	1,237	3.52	5,022	3.72
December	586	1.79	87,766	2.28	1,463	3.49	4,873	3.18
Total	6,420	1.61	1,006,712	2.28	16,669	3.40	42,302	3.42

See footnotes at the end of table.

Table SR6. U.S. Natural Gas Imports by Point of Entry, 1996-1997 (Continued)
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Canada (Pipeline)							
	Northeast							
	Highgate Springs, VT		Massena, NY		Niagara Falls, NY		North Troy, VT	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1996								
January	1,181	2.74	1,759	2.94	29,448	3.23	958	2.96
February	1,050	2.38	1,594	3.06	22,481	3.02	902	3.22
March	981	2.63	1,663	3.03	22,065	2.97	964	2.97
April	583	3.28	1,251	2.84	25,053	2.85	932	2.98
May	426	3.55	703	3.25	25,583	2.63	957	2.74
June	283	3.75	792	2.91	20,824	2.64	927	2.74
July	232	4.78	824	2.84	22,394	2.86	952	2.83
August	272	3.83	794	2.92	23,700	2.71	792	2.73
September	309	3.24	838	2.85	23,587	2.59	789	2.92
October	655	2.52	962	2.63	24,056	2.59	955	3.01
November	840	2.59	1,200	2.78	24,042	2.94	933	3.28
December	898	3.07	1,262	2.92	27,959	3.54	964	3.60
Total	7,711	2.92	13,642	2.92	291,193	2.90	11,024	3.00
1997								
January	1,159	2.97	1,430	3.22	26,740	3.74	974	3.01
February	965	2.36	1,299	3.30	23,876	3.22	880	3.28
March	1,027	2.12	1,403	2.80	24,406	2.54	974	3.60
April	682	2.26	1,049	2.85	23,945	2.38	933	2.73
May	500	2.78	973	2.98	22,969	2.56	964	2.78
June	293	3.32	786	3.15	22,585	2.58	923	2.75
July	280	3.32	837	3.10	23,781	2.55	852	2.73
August	300	3.12	770	3.16	24,305	2.58	955	2.80
September	372	2.99	845	3.08	22,885	2.76	918	2.91
October	622	2.95	988	3.00	25,753	3.02	971	3.08
November	856	3.02	1,177	3.00	23,879	3.40	898	3.13
December	1,080	2.28	1,371	2.93	23,740	2.99	964	2.70
Total	8,136	2.66	12,927	3.04	288,865	2.87	11,207	2.96

See footnotes at the end of table.

Table SR6. U.S. Natural Gas Imports by Point of Entry, 1996-1997 (Continued)
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Canada (Pipeline)						Mexico (Pipeline)			
	Northeast				Total		Texas			
	Waddington, NY		Total				Hidalgo, TX		Penitas, TX	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1996										
January	26,701	3.24	68,376	3.25	259,656	2.08	1,499	2.03	0	-
February	23,591	3.15	57,342	3.12	230,546	1.94	698	2.14	0	-
March	24,272	3.15	54,539	3.07	237,668	1.91	1,259	2.34	0	-
April	21,911	2.89	54,054	2.90	230,928	1.86	1,369	2.18	0	-
May	23,117	2.72	55,339	2.71	245,522	1.70	4,024	2.14	0	-
June	21,984	2.70	48,220	2.71	225,875	1.70	711	2.35	0	-
July	24,040	2.75	52,137	2.84	232,908	1.82	1,313	2.58	0	-
August	24,268	2.57	53,450	2.68	235,199	1.80	30	1.70	0	-
September	23,217	2.33	52,168	2.51	234,206	1.60	517	1.67	253	1.72
October	23,679	2.43	53,734	2.55	241,294	1.68	1,110	2.37	0	-
November	24,876	3.10	56,230	3.04	245,795	2.25	982	2.85	0	-
December	27,151	3.75	65,727	3.66	263,681	3.00	96	3.30	0	-
Total	288,807	2.92	671,314	2.94	2,883,277	1.96	13,609	2.26	253	1.72
1997										
January	26,502	3.82	63,980	3.81	266,756	3.27	1,555	3.09	0	-
February	24,250	3.32	57,880	3.29	230,352	2.50	2,526	2.49	0	-
March	25,475	2.56	61,390	2.62	251,328	1.70	3,127	1.83	0	-
April	23,292	2.31	53,282	2.41	235,431	1.66	189	1.92	0	-
May	24,083	2.46	53,172	2.57	234,345	1.81	2,380	2.03	0	-
June	23,864	2.58	51,946	2.64	225,366	1.87	1,692	2.20	0	-
July	23,875	2.46	53,139	2.56	229,479	1.82	1,088	1.98	0	-
August	23,760	2.46	53,455	2.58	237,142	1.81	6	2.35	0	-
September	23,200	2.67	51,530	2.76	232,090	2.00	29	2.47	0	-
October	24,292	2.96	56,364	3.03	245,742	2.32	965	2.92	0	-
November	25,155	3.36	58,224	3.40	257,782	2.71	1,874	2.82	0	-
December	27,821	2.80	61,313	2.91	253,338	2.17	1,810	2.12	0	-
Total	295,568	2.82	675,675	2.90	2,899,152	2.15	17,243	2.31	0	-

See footnotes at the end of table.

Table SR6. U.S. Natural Gas Imports by Point of Entry, 1996-1997 (Continued)
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Mexico (Pipeline)		LNG						Grand Total	
	Total		Everett, MA		Lake Charles, LA		Total			
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1996										
January	1,499	2.03	2,460	2.81	0	-	2,460	2.81	263,615	2.09
February	698	2.14	2,512	2.79	0	-	2,512	2.79	233,756	1.95
March	1,259	2.34	2,599	3.06	0	-	2,599	3.06	241,526	1.92
April	1,369	2.18	2,599	2.55	1,960	2.27	4,559	2.43	236,857	1.87
May	4,024	2.14	2,612	2.58	0	-	2,612	2.58	252,158	1.72
June	711	2.35	0	-	0	-	0	-	226,587	1.70
July	1,313	2.58	2,642	3.00	0	-	2,642	3.00	236,864	1.84
August	30	1.70	2,629	2.56	0	-	2,629	2.56	237,858	1.80
September	770	1.69	^a 2,524	3.34	0	-	2,524	3.34	237,500	1.62
October	1,110	2.37	5,116	2.96	0	-	5,116	2.96	247,520	1.71
November	982	2.85	2,504	2.94	2,527	2.25	5,031	2.59	251,807	2.26
December	96	3.30	^b 5,033	3.20	2,556	2.16	7,589	2.85	271,366	3.00
Total	13,862	2.25	33,232	2.92	7,042	2.22	40,274	2.80	2,937,413	1.97
1997										
January	1,555	3.09	^c 7,420	3.09	2,558	2.78	9,977	3.01	278,288	3.26
February	2,526	2.49	5,085	3.00	2,582	3.00	7,667	3.00	240,545	2.52
March	3,127	1.83	2,530	2.98	0	-	2,530	2.98	256,985	1.72
April	189	1.92	0	-	2,557	2.23	2,557	2.23	238,178	1.67
May	2,380	2.03	^d 2,455	2.68	2,552	2.20	5,007	2.44	241,732	1.83
June	1,692	2.20	2,504	2.49	2,555	2.49	5,059	2.49	232,118	1.88
July	1,088	1.98	2,498	2.47	2,528	2.48	5,026	2.48	235,593	1.84
August	6	2.35	4,984	2.43	2,551	2.43	7,535	2.43	244,684	1.83
September	29	2.47	^e 4,814	2.64	2,553	2.41	7,367	2.56	239,486	2.01
October	965	2.92	2,509	2.70	2,541	2.69	5,050	2.70	251,758	2.33
November	1,874	2.82	^f 7,359	2.95	^g 5,076	2.98	12,435	2.96	272,091	2.72
December	1,810	2.12	5,024	2.88	2,543	2.88	7,567	2.88	262,716	2.19
Total	17,243	2.31	47,183	2.81	30,596	2.63	77,778	2.74	2,994,173	2.17

^a Received from United Arab Emirates.

^b 2,608 received from Algeria and 2,425 received from United Arab Emirates.

^c 5,003 received from Algeria and 2,417 received from United Arab Emirates.

^d Received from Australia.

^e 2,477 received from Algeria and 2,337 received from Australia.

^f 4,995 received from Algeria and 2,363 received from Australia.

^g 2,546 received from Algeria and 2,530 received from Australia.

- = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. Geographic coverage is the continental United States including Alaska.

Source: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

Table SR7. Summary of U.S. Natural Gas Imports, 1977-1997
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				Total Pipeline	
	Canada		Mexico		Volume	Average Price
	Volume	Average Price	Volume	Average Price		
1977 Total	996,722	1.99	2,384	2.25	999,106	1.99
1978 Total	881,123	2.19	0	-	881,123	2.19
1979 Total	1,000,775	2.61	0	-	1,000,775	2.61
1980 Total	796,507	4.32	102,410	4.41	898,917	4.33
1981 Total	762,107	4.83	105,013	5.01	867,120	4.85
1982 Total	783,407	4.97	94,794	5.02	878,200	4.98
1983 Total	711,923	4.49	75,361	4.70	787,284	4.51
1984 Total	755,368	4.01	51,502	4.49	806,870	4.04
1985 Total	926,056	3.17	0	-	926,056	3.17
1986 Total	748,780	2.42	0	-	748,780	2.42
1987 Total	992,532	1.95	0	-	992,532	1.95
1988 Total	1,276,322	1.83	0	-	1,276,322	1.83
1989 Total	1,339,357	1.81	0	-	1,339,357	1.81
1990 Total	1,448,065	1.91	0	-	1,448,065	1.91
1991 Total	1,709,716	1.81	0	-	1,709,716	1.81
1992 Total	2,094,387	1.84	0	-	2,094,387	1.84
1993 Total	2,266,751	2.02	1,678	1.94	2,268,429	2.02
1994 Total	2,565,364	1.86	7,013	1.99	2,572,377	1.86
1995 Total	2,816,408	1.48	6,722	1.53	2,823,130	1.48
1996						
January	259,656	2.08	1,499	2.03	261,155	2.08
February	230,546	1.94	698	2.14	231,244	1.94
March	237,668	1.91	1,259	2.34	238,927	1.91
April	230,928	1.86	1,369	2.18	232,297	1.86
May	245,522	1.70	4,024	2.14	249,546	1.71
June	225,875	1.70	711	2.35	226,587	1.70
July	232,908	1.82	1,313	2.58	234,221	1.83
August	235,199	1.80	30	1.70	235,229	1.80
September	234,206	1.60	770	1.69	234,976	1.60
October	241,294	1.68	1,110	2.37	242,403	1.68
November	245,795	2.25	982	2.85	246,776	2.25
December	263,681	3.00	96	3.30	263,777	3.00
Total	2,883,277	1.96	13,862	2.25	2,897,138	1.96
1997						
January	266,756	3.27	1,555	3.09	268,310	3.27
February	230,352	2.50	2,526	2.49	232,878	2.50
March	251,328	1.70	3,127	1.83	254,455	1.70
April	235,431	1.66	189	1.92	235,621	1.66
May	234,345	1.81	2,380	2.03	236,725	1.82
June	225,366	1.87	1,692	2.20	227,059	1.87
July	229,479	1.82	1,088	1.98	230,567	1.82
August	237,142	1.81	6	2.35	237,149	1.81
September	232,090	2.00	29	2.47	232,119	2.00
October	245,742	2.32	965	2.92	246,707	2.32
November	257,782	2.71	1,874	2.82	259,656	2.71
December	253,338	2.17	1,810	2.12	255,149	2.17
Total	2,899,152	2.15	17,243	2.31	2,916,394	2.15

See footnotes at the end of table.

Table SR7. Summary of U.S. Natural Gas Imports, 1977-1997 (Continued)
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	LNG						Grand Total	
	Algeria		Canada		Other		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1977 Total	11,324	0.92	572	3.96	0	-	1,011,002	1.98
1978 Total	84,422	1.53	0	-	0	-	965,545	2.13
1979 Total	252,608	2.03	0	-	0	-	1,253,383	2.49
1980 Total	85,850	3.77	0	-	0	-	984,767	4.28
1981 Total	36,824	5.54	6	6.63	0	-	903,949	4.88
1982 Total	55,136	5.82	0	-	0	-	933,336	5.03
1983 Total	131,124	6.41	0	-	0	-	918,407	4.78
1984 Total	36,191	4.90	0	-	0	-	843,060	4.08
1985 Total	23,659	4.60	0	-	0	-	949,715	3.21
1986 Total	0	-	0	-	^a 1,669	4.62	750,449	2.43
1987 Total	0	-	0	-	0	-	992,532	1.95
1988 Total	17,490	2.71	0	-	0	-	1,293,812	1.84
1989 Total	42,163	2.22	0	-	0	-	1,381,520	1.82
1990 Total	84,193	2.47	0	-	0	-	1,532,259	1.94
1991 Total	63,596	2.36	0	-	0	-	1,773,313	1.83
1992 Total	43,116	2.54	0	-	0	-	2,137,504	1.85
1993 Total	81,685	2.20	0	-	0	-	2,350,115	2.03
1994 Total	50,778	2.28	0	-	0	-	2,623,155	1.87
1995 Total	17,918	2.30	0	-	0	-	2,841,048	1.49
1996								
January	2,460	2.81	0	-	0	-	263,615	2.09
February	2,512	2.79	0	-	0	-	233,756	1.95
March	2,599	3.06	0	-	0	-	241,526	1.92
April	4,559	2.43	0	-	0	-	236,857	1.87
May	2,612	2.58	0	-	0	-	252,158	1.72
June	0	-	0	-	0	-	226,587	1.70
July	2,642	3.00	0	-	0	-	236,864	1.84
August	2,629	2.56	0	-	0	-	237,858	1.80
September	0	-	0	-	^b 2,524	3.34	237,500	1.62
October	5,116	2.96	0	-	0	-	247,520	1.71
November	5,031	2.59	0	-	0	-	251,807	2.26
December	5,164	2.51	0	-	^b 2,425	3.57	271,366	3.00
Total	35,325	2.70	0	-	4,949	3.46	2,937,413	1.97
1997								
January	7,560	2.78	0	-	^b 2,417	3.74	278,288	3.26
February	7,667	3.00	0	-	0	-	240,545	2.52
March	2,530	2.98	0	-	0	-	256,985	1.72
April	2,557	2.23	0	-	0	-	238,178	1.67
May	2,552	2.20	0	-	^c 2,455	2.68	241,732	1.83
June	5,059	2.49	0	-	0	-	232,118	1.88
July	5,026	2.48	0	-	0	-	235,593	1.84
August	7,535	2.43	0	-	0	-	244,684	1.83
September	5,030	2.41	0	-	^c 2,337	2.88	239,486	2.01
October	5,050	2.70	0	-	0	-	251,758	2.33
November	7,542	2.89	0	-	^c 4,893	3.07	272,091	2.72
December	7,567	2.88	0	-	0	-	262,716	2.19
Total	65,675	2.67	0	-	12,103	3.09	2,994,173	2.17

^a Received from Indonesia.

^b Received from United Arab Emirates.

^c Received from Australia.

- = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. Geographic coverage is the continental United States including Alaska.

Source: 1994 and Earlier Years: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas". 1995 to 1997: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

Table SR8. U.S. Natural Gas Exports by Point of Exit, 1996-1997
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Canada (Pipeline)							
	Sumas, WA		Babb, MT		Detroit, MI		Marysville, MI	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1996								
January	373	1.70	0	-	1,299	3.03	354	3.17
February	79	1.60	0	-	2,776	2.32	234	2.79
March	0	-	0	-	4,046	2.51	0	-
April	0	-	0	-	2,085	2.12	0	-
May	0	-	0	-	2,634	2.11	50	2.45
June	0	-	0	-	2,155	2.10	0	-
July	0	-	0	-	2,296	2.20	0	-
August	0	-	0	-	1,850	2.21	0	-
September	0	-	0	-	2,284	1.86	0	-
October	0	-	0	-	3,549	1.85	0	-
November	239	3.63	63	1.46	2,804	2.50	0	-
December	760	3.23	27	1.70	2,631	3.71	0	-
Total	1,451	2.81	91	1.53	30,410	2.36	638	2.97
1997								
January	0	-	0	-	2,569	4.00	325	4.47
February	0	-	0	-	2,397	2.88	298	2.92
March	0	-	0	-	3,396	1.88	828	1.87
April	0	-	0	-	2,923	1.78	681	1.95
May	0	-	0	-	2,719	2.03	623	2.18
June	0	-	0	-	1,950	2.25	623	2.39
July	0	-	0	-	2,025	2.07	644	2.24
August	0	-	0	-	2,641	2.09	644	2.20
September	0	-	0	-	2,195	2.46	621	2.56
October	0	-	0	-	1,860	2.97	0	-
November	0	-	0	-	3,247	3.36	0	-
December	0	-	0	-	3,158	2.84	0	-
Total	0	-	0	-	31,080	2.55	5,286	2.36

See footnotes at the end of table.

Table SR8. U.S. Natural Gas Exports by Point of Exit, 1996-1997 (Continued)
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Canada (Pipeline)				Mexico (Pipeline)			
	St. Clair, MI		Total		Clint, TX		Douglas, AZ	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1996								
January	5,019	3.25	7,044	3.13	0	-	102	1.37
February	2,117	3.25	5,207	2.71	0	-	3	1.34
March	2,570	3.22	6,616	2.79	0	-	85	1.15
April	345	2.79	2,430	2.21	0	-	166	1.31
May	126	2.94	2,809	2.15	0	-	690	1.73
June	845	2.64	3,001	2.25	0	-	718	1.56
July	1,481	2.84	3,777	2.45	0	-	239	1.47
August	347	2.78	2,197	2.30	0	-	230	2.00
September	230	2.76	2,514	1.94	0	-	220	1.55
October	762	2.52	4,311	1.97	0	-	267	1.62
November	3,671	2.95	6,776	2.77	0	-	253	2.46
December	1,803	3.82	5,222	3.67	0	-	433	3.63
Total	19,315	3.13	51,905	2.67	0	-	3,405	1.92
1997								
January	1,299	4.15	4,193	4.08	0	-	555	4.09
February	2,474	3.18	5,169	3.02	0	-	805	2.36
March	4,891	2.20	9,115	2.05	0	-	780	1.49
April	1,564	1.70	5,168	1.78	0	-	13	1.89
May	766	2.18	4,107	2.08	0	-	78	1.95
June	589	2.27	3,162	2.28	0	-	156	2.00
July	588	2.29	3,257	2.14	0	-	328	2.00
August	535	2.38	3,820	2.15	0	-	279	2.07
September	312	1.40	3,129	2.37	0	-	386	2.33
October	572	2.46	2,432	2.85	0	-	254	2.86
November	2,332	2.74	5,579	3.10	0	-	17	2.90
December	4,160	2.39	7,318	2.58	111	2.24	251	2.16
Total	20,080	2.51	56,447	2.52	111	2.24	3,901	2.38

See footnotes at the end of table.

Table SR8. U.S. Natural Gas Exports by Point of Exit, 1996-1997 (Continued)
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Mexico (Pipeline)							
	Eagle Pass, TX		El Paso, TX		Hidalgo, TX		Penitas, TX	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1996								
January	124	2.38	1,382	1.98	0	-	0	-
February	97	2.06	1,069	1.76	0	-	831	1.89
March	85	2.18	846	1.61	0	-	1,845	1.91
April	69	2.48	862	1.95	827	1.44	0	-
May	62	2.34	1,148	1.89	0	-	0	-
June	56	2.46	811	2.01	1,242	2.44	660	2.43
July	48	2.65	1,238	2.24	666	2.39	870	2.30
August	56	2.44	1,731	2.12	3,719	2.13	3,440	2.10
September	58	2.01	810	1.61	457	1.92	844	1.78
October	78	1.98	1,264	1.90	380	1.79	0	-
November	94	2.77	1,186	2.56	0	-	0	-
December	116	3.84	1,060	3.76	305	3.63	0	-
Total	942	2.52	13,406	2.14	7,597	2.16	8,489	2.05
1997								
January	144	4.05	1,525	4.08	7	2.89	0	-
February	121	2.92	672	2.17	79	2.22	0	-
March	93	1.87	611	1.57	2	1.70	0	-
April	92	1.96	2,087	1.72	853	2.10	0	-
May	81	2.23	2,018	1.95	0	-	0	-
June	75	2.45	1,810	2.14	429	2.14	109	2.19
July	79	2.31	1,298	2.09	1,418	2.29	0	-
August	64	2.35	1,984	2.22	3,776	2.46	169	2.43
September	73	2.66	1,064	2.31	2,832	2.82	1,792	2.47
October	149	3.20	2,505	2.77	783	3.01	424	3.00
November	127	3.44	580	2.88	568	3.25	398	3.21
December	163	2.59	1,626	2.26	1,288	2.30	84	2.26
Total	1,260	2.79	17,779	2.36	12,035	2.54	2,977	2.62

See footnotes at the end of table.

Table SR8. U.S. Natural Gas Exports by Point of Exit, 1996-1997 (Continued)
 (Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Mexico (Pipeline)				Japan (LNG)		Grand Total	
	Calexico, CA		Total		Port Nikiski, AK			
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1996								
January	0	-	1,607	1.98	5,534	3.38	14,186	3.10
February	0	-	2,000	1.82	5,621	3.35	12,828	2.85
March	0	-	2,860	1.81	5,642	3.55	15,118	2.88
April	0	-	1,924	1.69	5,654	3.57	10,008	2.88
May	0	-	1,899	1.84	3,750	3.61	8,458	2.73
June	0	-	3,486	2.16	5,651	3.65	12,138	2.87
July	0	-	3,062	2.24	7,546	3.66	14,385	3.04
August	0	-	9,176	2.11	5,663	3.67	17,036	2.65
September	0	-	2,389	1.73	5,663	3.73	10,566	2.85
October	0	-	1,990	1.85	5,589	3.84	11,889	2.83
November	0	-	1,533	2.56	5,670	4.01	13,979	3.25
December	0	-	1,914	3.72	5,665	3.73	12,801	3.70
Total	0	-	33,840	2.11	67,648	3.65	153,393	2.97
1997								
January	0	-	2,231	4.08	5,604	4.25	12,028	4.16
February	0	-	1,677	2.32	5,596	4.20	12,443	3.46
March	0	-	1,486	1.55	5,675	4.16	16,276	2.74
April	0	-	3,044	1.83	5,660	4.06	13,872	2.72
May	0	-	2,177	1.96	3,812	3.83	10,097	2.72
June	0	-	2,579	2.14	3,786	3.72	9,527	2.81
July	*	2.53	3,122	2.17	3,756	3.66	10,136	2.71
August	10	2.56	6,282	2.37	7,532	3.62	17,633	2.86
September	13	2.84	6,159	2.59	3,767	3.58	13,055	2.83
October	67	3.44	4,182	2.87	5,676	3.58	12,289	3.19
November	91	3.70	1,782	3.16	5,691	3.66	13,051	3.35
December	128	2.69	3,650	2.30	5,631	3.58	16,600	2.86
Total	308	3.15	38,372	2.46	62,187	3.83	157,006	3.02

- = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. Geographic coverage is the continental United States including Alaska.

Source: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.

Table SR9. Summary of U.S. Natural Gas Exports, 1977-1997
(Volume in Million Cubic Feet; Average Price in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				Total Pipeline		LNG		Grand Total	
	Canada		Mexico		Volume	Average Price	Japan		Volume	Average Price
	Volume	Average Price	Volume	Average Price			Volume	Average Price		
1977 Total	31	1.54	3,940	1.41	3,971	1.41	51,655	1.96	55,626	1.92
1978 Total	66	1.79	4,003	1.65	4,098	1.66	48,434	2.17	52,532	2.13
1979 Total	76	2.04	4,308	1.97	4,384	1.97	51,289	2.32	55,673	2.29
1980 Total	113	3.31	3,886	2.47	3,999	2.50	44,732	4.90	48,731	4.70
1981 Total	106	4.79	3,337	3.37	3,443	3.41	55,929	6.05	59,372	5.90
1982 Total	162	4.95	1,705	5.17	1,867	5.15	49,861	5.83	51,728	5.81
1983 Total	136	4.60	1,646	4.79	1,782	4.78	52,857	5.11	54,639	5.10
1984 Total	127	4.19	1,786	4.48	1,913	4.46	52,840	4.93	54,753	4.83
1985 Total	178	3.06	2,207	3.99	2,385	3.92	52,883	4.81	55,268	4.77
1986 Total	9,203	2.12	1,896	3.49	11,099	2.35	50,172	2.91	61,271	2.81
1987 Total	3,297	1.81	2,125	3.18	5,421	2.35	48,599	3.15	54,020	3.07
1988 Total	19,738	2.02	2,327	3.21	22,065	2.14	51,573	2.99	73,638	2.74
1989 Total	38,443	2.00	17,004	2.14	55,447	2.05	51,424	3.01	106,871	2.51
1990 Total	17,359	2.70	15,659	1.88	33,018	2.31	52,546	3.59	85,565	3.10
1991 Total	14,791	1.91	60,448	1.76	75,239	1.79	54,005	3.71	129,244	2.59
1992 Total	67,777	1.83	95,973	1.90	163,750	1.88	52,532	3.43	216,282	2.25
1993 Total	44,518	2.14	39,676	2.02	84,195	2.08	55,989	3.34	140,183	2.59
1994 Total	52,556	2.42	46,500	1.68	99,057	2.08	62,682	3.18	161,738	2.50
1995 Total	27,554	1.96	61,283	1.50	88,836	1.64	65,283	3.41	154,119	2.39
1996										
January	7,044	3.13	1,607	1.98	8,651	2.91	5,534	3.38	14,186	3.10
February	5,207	2.71	2,000	1.82	7,206	2.46	5,621	3.35	12,828	2.85
March	6,616	2.79	2,860	1.81	9,476	2.49	5,642	3.55	15,118	2.88
April	2,430	2.21	1,924	1.69	4,354	1.98	5,654	3.57	10,008	2.88
May	2,809	2.15	1,899	1.84	4,709	2.03	3,750	3.61	8,458	2.73
June	3,001	2.25	3,486	2.16	6,487	2.20	5,651	3.65	12,138	2.87
July	3,777	2.45	3,062	2.24	6,839	2.35	7,546	3.66	14,385	3.04
August	2,197	2.30	9,176	2.11	11,373	2.15	5,663	3.67	17,036	2.65
September	2,514	1.94	2,389	1.73	4,903	1.84	5,663	3.73	10,566	2.85
October	4,311	1.97	1,990	1.85	6,301	1.93	5,589	3.84	11,889	2.83
November	6,776	2.77	1,533	2.56	8,309	2.73	5,670	4.01	13,979	3.25
December	5,222	3.67	1,914	3.72	7,136	3.68	5,665	3.73	12,801	3.70
Total	51,905	2.67	33,840	2.11	85,745	2.45	67,648	3.65	153,393	2.97
1997										
January	4,193	4.08	2,231	4.08	6,424	4.08	5,604	4.25	12,028	4.16
February	5,169	3.02	1,677	2.32	6,846	2.85	5,596	4.20	12,443	3.46
March	9,115	2.05	1,486	1.55	10,601	1.98	5,675	4.16	16,276	2.74
April	5,168	1.78	3,044	1.83	8,211	1.80	5,660	4.06	13,872	2.72
May	4,107	2.08	2,177	1.96	6,284	2.04	3,812	3.83	10,097	2.72
June	3,162	2.28	2,579	2.14	5,741	2.22	3,786	3.72	9,527	2.81
July	3,257	2.14	3,122	2.17	6,380	2.16	3,756	3.66	10,136	2.71
August	3,820	2.15	6,282	2.37	10,101	2.28	7,532	3.62	17,633	2.86
September	3,129	2.37	6,159	2.59	9,288	2.52	3,767	3.58	13,055	2.83
October	2,432	2.85	4,182	2.87	6,613	2.86	5,676	3.58	12,289	3.19
November	5,579	3.10	1,782	3.16	7,361	3.12	5,691	3.66	13,051	3.35
December	7,318	2.58	3,650	2.30	10,968	2.49	5,631	3.58	16,600	2.86
Total	56,447	2.52	38,372	2.46	94,818	2.49	62,187	3.83	157,006	3.02

Notes: Totals may not equal sum of components due to independent rounding. Geographic coverage is the continental United States including Alaska.

Source: 1994 and Earlier Years: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." 1995 to 1997: Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*.